Application No.: 10/765,742

Office Action Dated: December 9, 2008

This listing of claims will replace all prior versions, and listings, of claims in the application.

In the claims:

1. (Currently Amended) A user interface system, said system comprising a plurality of logical buttons and their physical equivalents, said physical equivalents being arranged symmetrically in a multi-dimensional manner, a subset of the physical equivalents arranged on a horizontal axis and a subset of the physical equivalents arranged on a vertical axis,

wherein a first subset of said physical equivalents is mapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement,

wherein a second subset of said physical equivalents is mapped to correspond to asymmetrical logical buttons having functionality unrelated to each other, and

wherein upon physical reorientation of the user interface system to a first position, the first subset of said physical equivalents is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and

wherein upon physical reorientation of the user interface system to a second position, the first subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other each of said physical equivalents is remapped to another of the logical buttons.

- 2. (Cancelled)
- 3. (Cancelled)

Application No.: 10/765,742

Office Action Dated: December 9, 2008

4. (Cancelled)

5. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to

the plurality of logical buttons and their physical equivalents, the physical equivalents

comprise a four-button diamond arrangement.

6. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to

the plurality of logical buttons and their physical equivalents, the physical equivalents

comprise an eight-button compass arrangement.

7. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to

the plurality of logical buttons and their physical equivalents, the physical equivalents

comprise a D-Pad.

8. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to

the plurality of logical buttons and their physical equivalents, the physical equivalents

comprise at least two pairs of physical buttons.

9. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to

the plurality of logical buttons and their physical equivalents, the physical equivalents

comprise two buttons and a wheel.

10. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to

the plurality of logical buttons and their physical equivalents, the physical equivalents

comprise a rocking wheel.

Page 3 of 23

Application No.: 10/765,742

Office Action Dated: December 9, 2008

11. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super wheel.

12. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise two buttons and a dogbone.

- 13. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a rocking dogbone.
- 14. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super dogbone.
- 15. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a plurality of discrete button pairs.
- 16. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a joystick.
- 17. (Currently Amended) The user interface system of claim [[2]] 1 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a touchpad.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

18. Cancelled.

19. (Currently Amended) A computer-implemented method for navigating an object comprising the utilization of a user interface system, said system comprising a plurality of logical buttons and their physical equivalents, said physical equivalents being arranged symmetrically in a multi-dimensional manner, a subset of the physical equivalents arranged on a horizontal axis and a subset of the physical equivalents arranged on a vertical axis, the method comprising:

mapping a first subset of said physical equivalents to symmetrical logical buttons for either horizontal movement or vertical movement;

mapping a second subset of said physical equivalents to asymmetrical logical buttons having functionality logically unrelated to each other,

upon physical reorientation of the user interface system to a first position, the first subset of said physical equivalents is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and

wherein upon physical reorientation of the user interface system to a second position, the first subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other remapping each of said physical equivalents to another of the logical buttons.

- 20. (Cancelled)
- 21. (Cancelled)

Application No.: 10/765,742

Office Action Dated: December 9, 2008

22. (Cancelled)

23. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the

plurality of logical buttons and their physical equivalents, the physical equivalents comprise a

four-button diamond arrangement.

24. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the

plurality of logical buttons and their physical equivalents, the physical equivalents comprise

an eight-button compass arrangement.

25. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the

plurality of logical buttons and their physical equivalents, the physical equivalents comprise a

D-Pad.

26. (Currently Amended) The method of claim 20]] 19 wherein, in regard to the plurality

of logical buttons and their physical equivalents, the physical equivalents comprise at least

two pairs of physical buttons.

27. (Currently Amended) The method of claim 20]] 19 wherein, in regard to the plurality

of logical buttons and their physical equivalents, the physical equivalents comprise two

buttons and a wheel.

28. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the

plurality of logical buttons and their physical equivalents, the physical equivalents comprise a

rocking wheel.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

29. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super wheel.

- 30. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise two buttons and a dogbone.
- 31. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a rocking dogbone.
- 32. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super dogbone.
- 33. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a plurality of discrete button pairs.
- 34. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a joystick.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

35. (Currently Amended) The method of claim [[20]] 19 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a

touchpad.

36. Cancelled.

37. (Currently Amended) A computer-readable <u>storage</u> medium having computer-readable instructions for navigating an object comprising the utilization of a user interface system, said system comprising a plurality of logical buttons and their physical equivalents, said physical equivalents being arranged symmetrically in a multi-dimensional manner, a <u>subset of the physical equivalents arranged on a horizontal axis and a subset of the physical equivalents arranged on a vertical axis</u>, the instructions for performing the following:

mapping a first subset of said physical equivalents to symmetrical logical buttons for either horizontal movement or vertical movement;

mapping a second subset of said physical equivalents to asymmetrical logical buttons having functionality unrelated to each other; and

upon physical reorientation of the user interface system to a first position, the first subset of said physical equivalents is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and

wherein upon physical reorientation of the user interface system to a second position, the first subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other remapping each of said physical equivalents to another of the logical buttons.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

- 41. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a four-button diamond arrangement.
- 42. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise an eight-button compass arrangement.
- 43. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a D-Pad.
- 44. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise at least two pairs of physical buttons.
- 45. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise two buttons and a wheel.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

46. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a rocking wheel.

- 47. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super wheel.
- 48. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise two buttons and a dogbone.
- 49. (Currently Amended)The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a rocking dogbone.
- 50. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super dogbone.
- 51. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a plurality of discrete button pairs.
- 52. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a joystick.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

53. (Currently Amended) The computer-readable medium of claim [[38]] <u>37</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a touchpad.

54. Cancelled.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

55. (Currently Amended) A hardware control device for navigating an object comprising a user interface system, said system comprising a plurality of logical buttons and their physical equivalents, said physical equivalents being arranged symmetrically in a multi-dimensional manner, said physical equivalents comprising a four-button diamond arrangement, a first pair of the four button diamond arrangement arranged on a horizontal axis and a second pair of the four button diamond arrangement arranged on a vertical axis,

wherein [[a]] the first pair of the four button diamond arrangement subset of said physical equivalents is mapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement,

wherein [[a]] the second pair of the four button diamond arrangement subset of said physical equivalents is mapped to correspond to asymmetrical logical buttons having functionality unrelated to each other, and

wherein upon physical reorientation of the user interface system to a first position, the first pair of the four button diamond arrangement is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second pair of the four button diamond arrangement is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and

wherein upon physical reorientation of the user interface system to a second position, the first pair of the four button diamond arrangement is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second pair of the four button diamond arrangement is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other each of said physical equivalents is remapped to another of the logical buttons.

- 56. (Cancelled)
- 57. (Cancelled)

Application No.: 10/765,742

Office Action Dated: December 9, 2008

58. (Cancelled)

59. (Cancelled)

60. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise an eight-button compass arrangement.

- 61. (Currently Amended) The hardware control device of claim 56 wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a D-Pad.
- 62. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise at least two pairs of physical buttons.
- 63. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise two buttons and a wheel.
- 64. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a rocking wheel.
- 65. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in regard to the plurality of logical buttons and their physical equivalents, the physical equivalents comprise a super wheel.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

66. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in

regard to the plurality of logical buttons and their physical equivalents, the physical

equivalents comprise two buttons and a dogbone.

67. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in

regard to the plurality of logical buttons and their physical equivalents, the physical

equivalents comprise a rocking dogbone.

68. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in

regard to the plurality of logical buttons and their physical equivalents, the physical

equivalents comprise a super dogbone.

69. (Currently Amended) The hardware control device of claim [[56]] 55 wherein, in

regard to the plurality of logical buttons and their physical equivalents, the physical

equivalents comprise a plurality of discrete button pairs.

70. (Currently Amended) The hardware control device of claim [[56]] 55 wherein, in

regard to the plurality of logical buttons and their physical equivalents, the physical

equivalents comprise a joystick.

71. (Currently Amended) The hardware control device of claim [[56]] <u>55</u> wherein, in

regard to the plurality of logical buttons and their physical equivalents, the physical

equivalents comprise a touchpad.

72. Cancelled.

Application No.: 10/765,742

Office Action Dated: December 9, 2008

73. (Currently Amended) A hardware control device, said device comprising a plurality of logical buttons and their physical equivalents,

said device comprising a means by which a plurality of symmetrical physical equivalents arranged in a multi-dimensional manner, a subset of the physical equivalents arranged on a horizontal axis and a subset of the physical equivalents arranged on a vertical axis, are mapped to a corresponding plurality of asymmetrical logical buttons, said asymmetrical logical buttons being logically unrelated to each other,

wherein a first subset of said physical equivalents is mapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement,

wherein a second subset of said physical equivalents is mapped to correspond to asymmetrical logical buttons having functionality unrelated to each other, and

wherein upon physical reorientation of the user interface system to a first position, the first subset of said physical equivalents is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and

wherein upon physical reorientation of the user interface system to a second position, the first subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other each of said physical equivalents is remapped to another of the logical buttons.